

## **REMARKS/ARGUMENTS**

Applicants have received the Office Action dated August 22, 2006, in which the Examiner: 1) objected to claim 1 because of informalities; 2) rejected claims 1-8 and 10-22 under 35 U.S.C. § 102(b) as being anticipated by Abramov et al. (U.S. Pat. No. 6,327,676, hereinafter "Abramov"); and 3) rejected claim 9 under 35 U.S.C. § 103(a) as being obvious over Abramov in view of Wikipedia ("en.wikipedia.org/wiki/12C," hereinafter "Wikipedia"). With this Response, Applicants have amended claims 1, 14 and 20. Based on the amendments and arguments contained herein, Applicants believe this case is in condition for allowance.

### **I. OBJECTION TO CLAIM 1 FOR INFORMALITIES**

The Examiner objected to claim 1 as not conforming to the proper form for a claim preamble. Applicants have amended claim 1 as requested by the Examiner, and respectfully request withdrawal of the objection.

### **II. REJECTIONS UNDER 35 U.S.C. § 102(b)**

The Examiner rejected independent claim 1 as anticipated by Abramov, stating that Abramov discloses, among other things, a switching device that selectively operates to simulate a hardware error on at least one of the plurality of data lines based on an input signal from a control logic external to the memory module, wherein the switching device is the test equipment described in Abramov. Applicants respectfully note that claim 1, as amended, requires that the switching device be "attached to the outer surface of one of the plurality of memory circuits." The test equipment described by Abramov (an HP logic analyzer and signal generator) is external to the addressable memory, as well as to the entire system described. Abramov does not teach or even suggest mounting the test equipment to the surface of the memory circuits. Further, it is not even physically possible to attach the test equipment described in Abramov to the surface of a memory circuit while still being able to install and operate the memory circuits within a computer system. For at least these reasons, Applicants respectfully submit that independent claim 1 as amended, and those claims that depend upon it, are in condition for allowance.

With regard to independent claim 6, the Examiner again analogized the test equipment described in Abramov to the switching device of the present application, rejecting the claim for reasons similar to those given in the rejection of claim 1. Applicants respectfully traverse the Examiner's rejection, noting that claim 6 includes the limitation "simulating the hardware error on the data line by a switching unit *on the memory module*" (emphasis added). As already discussed, Abramov discloses test equipment that is external to the addressable memory described. Abramov does not teach or even suggest test equipment that is "on the memory module." Further, as explained above, it would not be possible to plug in and operate a memory module within a computer system if the test equipment described in Abramov were "on the memory module." For at least these reasons, Applicants respectfully submit that independent claim 6, as well as those claims that depend upon it, are in condition for allowance.

The Examiner also rejected independent claim 14 for reasons similar to those given with regard to claims 1 and 6. Applicants respectfully note that claim 14, as amended, requires that the switching device and the memory module both be physically located inside the system. Abramov does not teach or even suggest this limitation, as previously noted. Further, claim 14 includes the limitation "the control logic *operable by the CPU*" (emphasis added). Abramov teaches a separate external testing device that is used to induce the hardware error from outside the system. Abramov does not teach or even suggest a switching device that is operable by a CPU, where the CPU is within the system in which the hardware error is being induced. For at least these reasons, Applicants respectfully submit that independent claim 14, as well as those claims that depend upon it, are in condition for allowance.

The Examiner further rejected independent claim 20 for reasons similar to those of independent claims 1, 6 and 14. Applicants respectfully traverse the Examiner's rejection, noting that claim 20 as amended<sup>1</sup> requires "a plurality of

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<sup>1</sup> Applicants note that the amendment to claim 20 was made to correct a minor typographical error, and was not made in response to any rejection of the claim.

means for storing data, wherein at least one of the means for storing data *is integrated* with a means for driving a simulated hardware error” (emphasis added). As previously noted, Abramov neither teaches nor even suggest integrating the test equipment with the addressable memory described. Because Abramov does not teach all of the limitations of independent claim 20, Applicants respectfully submit that this claim, as well as those claims that depend upon it, are all in condition for allowance.

### **III. REJECTIONS UNDER 35 U.S.C. § 103(a)**

The Examiner also rejected claim 9 as obvious over Abramov in view of Wikipedia. Applicants respectfully note that the Examiner has not provided any evidence showing that the reference predates the filing date of the present application, which is necessary to establish the reference as prior art. Specifically, in the Notice of Reference Cited attached to the subject Office Action, the reference is described only as “Wikipedia – en.wikipedia.org/wiki/I2C,” without any indication of a date. Further, even if the Wikipedia reference is shown to qualify as prior art, this reference fails to overcome the deficiencies described above for Abramov with regard to claim 6, upon which claim 9 depends. The cited references, when combined, thus fail to include all of the limitations of claim 6 and thus do not render either independent claim 6 or dependent claim 9 obvious. For at least these reasons, Applicants respectfully submit that claim 9 is allowable, and respectfully request that the Examiner withdraw this rejection

### **IV. CONCLUSION**

In the course of the foregoing discussions, Applicants may have at times referred to claim limitations in shorthand fashion, or may have focused on a particular claim element. This discussion should not be interpreted to mean that the other limitations can be ignored or dismissed. The claims must be viewed as a whole, and each limitation of the claims must be considered when determining the patentability of the claims. Moreover, it should be understood that there may be other distinctions between the claims and the cited art which have yet to be raised, but which may be raised in the future.

**Appl. No. 10/763,693**  
**Amdt. dated December 21, 2006**  
**Reply to Office Action of August 22, 2006**

Applicants respectfully request reconsideration and that a timely Notice of Allowance be issued in this case. It is believed that no extensions of time or fees are required, beyond those that may otherwise be provided for in documents accompanying this paper. However, in the event that additional extensions of time are necessary to allow consideration of this paper, such extensions are hereby petitioned under 37 C.F.R. § 1.136(a), and any fees required (including fees for net addition of claims) are hereby authorized to be charged to Hewlett-Packard Development Company's Deposit Account No. 08-2025.

Respectfully submitted,



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